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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,678

02/25/2004

Naoki Toyoshima

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09/14/2006

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EXAMINER

GARLAND, STEVEN R

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,678

Applicant(s)

TOYOSHIMA ET AL.

Examiner

Steven R. Garland

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/15/05; 6/26/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-20, 22-35, 37-70 and 72-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20, 22-35, 37-70 and 72-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/15/05, 6/26/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-10, 12-20,22-35,37-70, and 72-105 are pending. Claims 11,21,36, and 71 have been cancelled.

2. The amendment filed 6/26/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: (in the amendment to the first paragraph of page 1), the incorporation by reference of 10/789,895 is new matter. The original application, original declaration, and original preliminary amendment all lacked any reference to the 10/789,895 application or to its incorporation by reference.

Applicant is required to cancel the new matter in the reply to this Office Action.

It is suggested that the "incorporation by reference" language be deleted from the paragraph.

3. The disclosure is objected to because of the following informalities: (in the amendment to paragraph beginning at page 12, line 3, table A does not contain any tS or S subscripted variables $tS_{i,j,k}, \dots, S_{i,j,k}$ but only variables $tS1, tS2, tS3$, etc. or $S1, S2, S3$ (which do not have subscripts). Also in claims 19, 20, 44,45,etc. what the variable " tS_{x-1} " represents should be specified, since only " tS_x " and " tS_{x+1} " are specifically identified. .

Appropriate correction is required.

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not state that the person making the oath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

Note that the declaration states that "I am the original, first and sole inventor" and then lists multiple inventors with their signatures, it appears that there are joint inventors and if this is the case the declaration should reflect this fact with the correct language referring to joint inventors being used. Otherwise only the sole inventor should sign the declaration.

The substitute declaration has not been received to date.

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-10,12-20,22-35, and 37-60 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. for example claim 1, is directed to a method of data analysis in which the claim recites data gathering, performing calculations, keying the data (relating the data to something else such as time and date), combining the production and non-production data into a single data set and analyzing the data however no useful, concrete, and tangible result is produced such as using the results of the analysis for control.

Similar comments apply to the other claims.

In response to applicant's arguments, claim 1 for example still lacks any tangible result such as using a result of analysis for control of manufacturing.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-10,12-20,22-35,37-70, and 72-105 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For example, regarding independent claims 1,9,17,23,26,34,42,48,55,61,69,77,83,89,95,102 and their respective dependent claims the difference between the terms "non-production data" and "production data" is extremely ambiguous when the claims are read in light of the specification and which leads to great uncertainty as to what is being claimed.

For example in claim 1, lines 3-9 refer to production and non-production data, however it is unclear what is to be regarded as production data and what is to be regarded as non-production data when the claims are read in light of the specification.

It would appear that "production data" could be measurements directly related to the manufacturing process being performed (page 6, lines 30,31, and page 7, line 1). However page 7, lines 11-22, then provides a much broader definition in that the production data can be any data (the data is not required to even be a measurement) that relates directly to the manufacturing process, **regardless of what it is actually called.**

Non-production data (or otherwise named as facility data) could be data from sources not directly related to the manufacturing process (page 7, lines 23-30).

However on page 8, lines 4-6, the definition of non-production data is broaden to any data that does not relate directly to the manufacturing process can be considered to be non-production or facility data, **regardless of what it is called**.

Page 3, lines 16-18, describes equipment control data or equipment data as being facility (non-production) data such control data would appear to be production data in that it is directly related to the manufacturing process if the equipment is used in the process, but by the cited text it is non production data. Further the language pointed out above **any data can be considered to be production(non-production) data regardless of what it is actually called** does not provide any additional clarity and in fact adds great uncertainty as to what the differences are between the production and non production data.

It is noted that by use of the definitions cited above including the phrase **“regardless of what it is actually called”** that data which is actually named production data could in fact be “non-production data” and vice versa. This leads to confusion and speculation as to what is being claimed.

Further page 3, line 16 refers to equipment data as facility data which is a form of non-production data. However page 7, lines 11-22, then refers to data such as equipment temperature as offline production data and it is not clear as to whether equipment data is to be regarded as production or non production data.

Additionally dependent claim 6 appears to modify the definition of "production data" to include data that is relevant to the production process and its condition which appears to overlap non-production data on page 7, lines 23-30 leading to more uncertainty. Similar comments apply to the "non-production data " of claim 16.

In regards to claim 2, while a form of collecting production data from a test probe is specified, however no additional guidance is provided as to what the non-production data is leading to speculation as to what it might or might not be.

In claim 19, various terms lack a proper antecedent basis such as in line 5, "the calculated lot data"; lines 5-6, "the most recent facility data sampling" and lines 5-6 "the time of the most recent facility data sampling".

Claim 22 is incomplete, since it depends on cancelled claim 21 .

Claim 26, last line, "the manufacturing process" lacks a proper antecedent basis. Claims 34, 42, etc. has a similar problem.

The other claims have problems similar to the various examples given above.

Applicant's arguments have been fully considered but are not deemed persuasive. The examiner has provided several examples above regarding the uncertainty as to what is to be regarded as production data and what is to be regarded as non-production data in applicant's own specification. This confusion as to what is regarded as production and non-production data causes even more speculation when trying to compare the instant claims to the prior art.

Further applicant argues that the production data is directly related to manufacturing and non-production data is not directly related to manufacturing. On the surface these might appear to be clear definitions, as urged by applicant, but when viewed in light of the specification and the various examples cited above they are not, but only appear to be one of many possible interpretations of the terms. Applicant also argues that the language was used for brevity, 35 U.S.C. 112 2nd paragraph does not require brevity but instead requires that the claims distinctly point and claim the invention, which the instant claims fail to do so.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The terms “non-production data” and “production data” used in the claims are indefinite because the specification does not clearly redefine the terms.

9. In view of the speculation required to interpret the meaning of the claims and their terms no art rejection is applied to claims 1-10, 12-20,22-35,37-70, and 72-105. See *In re Steele* 134 USPQ 292; 305 F.2d 859.

Given the speculation required to interpret the claims even more speculation would be required to interpret any applied reference given that a quantity labeled as “production data “ or “non-production data” in a reference might not be due to the ambiguity of the definitions in the instant application.

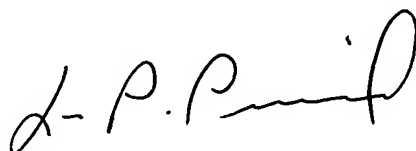
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SRG
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Examiner
Art Unit 2125

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